Adam Cook

Knoxville, TN 37919

(865) 438 - 9714 · ajc14654@gmail.com

EDUCATION:

M.S., Computer Science — September 2022 - May 2024

- University of Tennessee, Knoxville
- Graduated: May 2024
- GPA: 3.5

B.S., Computer Science — August 2018 - May 2022

- University of Central Florida
- Minor: Intermediate Robotic Systems (IRS)
- GPA: 3.836
- Graduated May 2022, Cum Laude

FIELDS OF INTEREST:

Artificial intelligence, computer vision, image processing, software development, robotics

EXPERIENCE:

University of Tennessee, Knoxville - Research Assistant — May 2023 – May 2024

- Worked with Dr. Mongi Abidi to update and improve a GUI application for machine learning (ML)
- Integrated new ML architectures to detect and classify objects
- Analyzed proficiency of various ML models for object detection under image augmentation

GP Instruments – Mechanical Designer — May 2017 – August 2017

- Used CAD software to create drawings of various components of an autosampler
- Designed a product that would be used to analytically treat dysphagia
- Printed materials using a 3D printing, laser-cutting, and stereolithography

PROJECTS:

DocuMint– Class Project — February 2024 – May 2024

- Compared performance of various SLMs for generating docstrings
- Helped compile dataset to fine-tune CodeGemma 2B for generating docstrings

Fast Simulation of Datasets using Augmentation – Graduate Project — January 2024 – April 2024

- Used GUI application to generate a large dataset of augmented images for retraining ML models
- Automated annotation process for training and validation images
- Trained YOLO-NAS S on the augmented data to improve robustness in detections under degradation
- Documented process of gathering input images, optimizing degradations, and performance comparison

Through My Eyes - Senior Design Project — September 2021 - April 2022

- Developed VR simulation to represent the effects and symptoms of visual impairments
- Directed team members across project timeline and maintained budget
- Created continuous locomotion system in Unity for the user to move with

SKILLS:

Programming Languages:Python, Java, C, C#,, Javascript

Software: Eclipse, IntelliJ, NetBeans, Git, Unity, Microsoft Office, SolidWorks

Libraries/APIs: Android, NumPy, Matplotlib, Pandas, Keras, Scikit, CV2, ROS, ONNX, PyQt5, Super-Gradients

References available upon request